Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

Effects of Sound on Marine Environments

1.2. Summary description of the data:

This is a modeling tools for estimating the impact of sound on marine life. The goal is to provide state-of-the-art, open source codes to model sound sources, sound propagation and animal behavior. It will assemble open source environmental databases for quantities such as seabed properties, bathymetry and ocean sound speed. Together, these tools will provide the best estimate of the impact of various sonar systems on the marine environment. These tools are bundled with a simple user interface in the ESME Workbench and are intended to be a type of gold standard for estimating impact. Currently, Navy environmental impact statements are prepared at the Naval Undersea Warfare Center (NUWC) and by several government contractors.

The software and databases being used are often either classified or proprietary. Starting in 2007, ONR put together a team consisting Boston University (David Mountain), Biomimetica (Dorian Houser) and HLS Research (M. Siderius and M. Porter) to build the ESME Workbench to make the needed calculations for assessing environmental impact without using classified or proprietary components.

1.3. Is this a one-time data collection, or an ongoing series of measurements?

Ongoing series of measurements

1.4. Actual or planned temporal coverage of the data:

2009 to Present

1.5. Actual or planned geographic coverage of the data:

W: -180, E: 180, N: 90, S: -90 Except territorial waters

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Profile (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

Instrument: Not Applicable Platform: Not Applicable

Physical Collection / Fishing Gear: Not Applicable

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

Amy Scholik

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

NMFS Office Of Protected Resources

2.4. E-mail address:

Amy.Scholik@noaa.gov

2.5. Phone number:

301-427-8449

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

Amy Scholik

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

Yes

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

Unknown

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:

The NOAA Fisheries Acoustics Program is investigating all aspects of marine animal acoustic communication, hearing, and the effects of sound on behavior and hearing in protected marine species. Our draft acoustic guidance for assessing the effects of anthropogenic sound on marine mammal species can be accessed at our website: http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

NOAA has compiled, interpreted, and synthesized best available information currently available on the effects of anthropogenic sound on marine mammals, as well as developed a method for updating these levels through a systematic, transparent process. This information can be found on our website: http://www.nmfs.noaa.gov/pr/acoustics/guidelines.htm

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

- **6.1. Does metadata comply with EDMC Data Documentation directive?** Yes

 - 6.1.1. If metadata are non-existent or non-compliant, please explain:
- 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

- 6.2.1. If service is needed for metadata hosting, please indicate:
- 6.3. URL of metadata folder or data catalog, if known:

https://inport.nmfs.noaa.gov/inport/item/29612

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: https://inport.nmfs.noaa.gov/inport/downloads/data-documentation-procedural-directive.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

No

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

The data being collected is restricted.

7.2. Name of organization of facility providing data access:

NMFS Office Of Protected Resources

7.2.1. If data hosting service is needed, please indicate:

Not Applicable

7.2.2. URL of data access service, if known:

http://esme.bu.edu

7.3. Data access methods or services offered:

The effects of sound in the marine environment (ESME) workbench: A simulation tool to predict the impact of anthropogenic sound on marine mammals should contact NMFS OPR.

7.4. Approximate delay between data collection and dissemination:

Not Applicable

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

Not Applicable

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

To Be Determined

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

To be determine the need and location of data achiving

8.2. Data storage facility prior to being sent to an archive facility (if any):

NMFS Office Of Protected Resources - Silver Springs, MD

Working with Boston University ONR Life Sciences Research Program focused on producing an integrated computer model of animal response to the sound fields

8.3. Approximate delay between data collection and submission to an archive facility:Not Applicable

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

We house copies of the data on an internal server maintained by NOAA NMFS CIO. The NMFS OCIO is responsible for the IT security and contingency plan for data stored on their networks. The NOAA NMFS OCIO establishes procedures and policies required for the recovery and restoration of data destroyed or loss.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.